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09/755,047	01/08/2001	Takuji Goda	K-1951	6751

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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 14

Application Number: 09/755,047
Filing Date: January 08, 2001
Appellant(s): GODA ET AL.

Manabu Kanesaka
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/24/2003 and the supplemental appeal brief filed 7/3/2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 8 and 10 do stand or fall together.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,808,715	Tsai	9-1998

(10) Grounds of Rejection

The following grounds of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,808,715 to Tsai et al. (hereinafter referred to as Tsai).

Tsai discloses a glass substrate for a display comprising an alkali-containing glass substrate (12b), a TiO_2-SiO_2 composite layer (13b), an ITO film (14b), a TiO_2-SiO_2 film (15b), and an electrode film (10a) in that enumerated order (Figure 2 and column 4, lines 3-14). Tsai does not mention the surface electrical resistance of the TiO_2-SiO_2 film (15b), but considering that the film comprises a highly resistant composite of TiO_2-SiO_2 (column 4, lines 15-32 and column 6, lines 16-18), and since the material is substantially identical to the material suggested by the applicant (see applicant's specification on page 11, lines 10-13), the film would inherently possess an electrical resistance within the range of 1.0×10^6 to 1.0×10^{16} Ω/□ even after a heating process at 550C for 1 hour.

Tsai also discloses that a conventional glass substrate for a display comprises an alkali-containing glass substrate (2b), a SiO_2 layer (3b), an ITO film (4b), a SiO_2 or TiO_2 film (not shown, see column 1, lines 51-59), and an electrode film (2a plus 3a plus 4a) in that enumerated order (Figure 1 and column 1, lines 13-65). Tsai does not mention the surface electrical

resistance of the SiO_2 or TiO_2 film (not shown), but considering that the film comprises SiO_2 or TiO_2, which are identical materials to the material suggested by the applicant (see applicant's specification on page 11, lines 10-13), the film would inherently possess an electrical resistance within the range of 1.0×10^6 to 1.0×10^{16} Ω/□ even after a heating process at 550C for 1 hour.

(11) Response to Argument

Tsai discloses two layered structures identical to the currently claimed article. The first structure comprises, in sequence, an alkali-containing glass substrate (12b), a TiO_2-SiO_2 composite layer (13b), an indium oxide-tin oxide (ITO) film (14b), a TiO_2-SiO_2 composite film (15b), and an electrode film (10a) (Figure 2 and column 4, lines 3-14). The second structure comprises, in sequence, an alkali-containing glass substrate (2b), a SiO_2 layer (3b), an indium oxide-tin oxide (ITO) film (4b), a TiO_2 or SiO_2 film (not shown, see column 1, lines 51-59), and an electrode film (2a + 3a + 4a) (Figure 1, column 1, lines 13-65).

The appellant asserts "The operation of the barrier film of the invention is not considered at all in Tsai et al." The appellant is asserting that the ITO film of Tsai does not constitute the barrier film of the currently claimed invention, because Tsai teaches that the ITO film is used as an electrode rather than a barrier film. The examiner respectfully disagrees. A recitation of the intended use of the layers of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The prior art structure is capable of performing the intended use claimed by the current applicant, therefore, the prior art reads on the currently pending claims.

The appellant asserts "In Tsai et al., the TiO_2-SiO_2 overcoat 15b is formed on the ITO layer 14b, but no electrode is formed on the TiO_2-SiO_2 overcoat 15b." The examiner respectfully disagrees. Electrode film 10a is deposited on the TiO_2-SiO_2 overcoat 15b (see Figure 2, and column 4, lines 3-14).

The appellant asserts "the electrode film 10a is deposited on the opposite side of the liquid crystal 17, so that the electrode 10a can not be considered as a part of the structure discussed here." The examiner respectfully disagrees. Tsai discloses that Figure 2 is a "cross-sectional structure of an entire LCD" (column 3, lines 55-57). Tsai clearly teaches that the structure illustrated in Figure 2 is a single structure wherein electrode 10a is on overcoat film 15b.

The appellant asserts "the specific electrical resistance of the invention (film 15b) is not disclosed or suggested in Tsai et al." The examiner respectfully disagrees. Tsai does not disclose the specific surface electrical resistance of the TiO_2-SiO_2 film (15b), but considering that the film comprises a highly resistant composite of TiO_2-SiO_2 (column 4, lines 15-32 and column 6, lines 16-18), and since the material is substantially identical to the material suggested by the applicant (see appellant's specification on page 11, lines 10-13), absent a showing to the contrary, which the appellant has not made, the film appears to inherently possess an electrical resistance within the range of 1.0×10^6 to 1.0×10^{16} Ω/□ even after a heating process at 550C for 1 hour.

The appellant asserts "Even if the material is similar to that used in the invention, the electrical resistance can be changed easily." The examiner contends that such a blanket statement is not evidence teaching or suggesting that the film taught by the prior art possess an

electrical resistance outside the range of 1.0×10^6 to 1.0×10^{16} Ω/□ even after a heating process at 550C for 1 hour.

The burden of proof is on the appellant when a rejection is based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, because of the Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). The appellant has failed to provide any evidence teaching or suggesting that the film taught by the prior art possess an electrical resistance outside the range of 1.0×10^6 to 1.0×10^{16} Ω/□ even after a heating process at 550C for 1 hour.

The appellant asserts that it was improper for the examiner to make the Office Action mailed 5/1/2003 a Final Office Action. The appellant asserts that inconsistencies in the rejections made by the examiner in paragraphs 8 and 9 of the first Final Office Action (mailed 10/8/2002) necessitated the new grounds of rejection in the subsequent second Final Office Action (mailed 5/1/2003). The examiner respectfully disagrees. The amendment filed on 8/29/2002 necessitated the first Final Office Action which subsequently necessitated the second (corrected) Final Office Action. The intended rejection of the first Final Office Action was clear and the corrected typographical errors were not a factor in the propriety of the finality.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

ANDREW T. PIZIALI
PATENT EXAMINER

atp
September 23, 2003

Conferees
Deborah Jones
Paul Thibodeau

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